AMENDMENTS TO THE CLAIMS

Please amend claims 21, 30, 35-36, cancel claims 22-23, 33-34 and 37, and add new claims 41-44, such that the status of the claims is as follows:

1-20. (Canceled)

21. (Currently Amended) A method of writing to a magnetic media, the method comprising:

producing a current in a coil by configuring a current generation circuit to produce a high frequency oscillation in the current following a transition of the current from one direction to the opposite direction, wherein the current generates a magnetic write field and a high frequency magnetic field; and

wherein the magnetic write field and the high frequency magnetic field create an area of magnetic resonance within the magnetic media.

22-23. (Canceled)

24. (Previously Presented) The method of claim 21, wherein the current causes magnetic precession within a magnetic write pole.

25. (Previously Presented) The method of claim 24, wherein the magnetic precession within the magnetic write pole generates the high frequency magnetic field.

26. (Previously Presented) The method of claim 21, wherein the high frequency magnetic field is oriented parallel to the magnetic media.

27. (Previously Presented) The method of claim 21, wherein the high frequency magnetic field is oriented perpendicular to the magnetic media.

28. (Previously Presented) The method of claim 21, further including selecting the magnetic media and frequency of the high frequency magnetic field such that a magnitude of the magnetic write field that will create magnetic resonance within the magnetic media corresponds to the steepest magnitude gradient of the magnetic write field.

29. (Previously Presented) The method of claim 28, wherein a frequency of the magnetic write field is much less than a frequency of the high frequency magnetic field, and wherein the frequency of the high frequency magnetic field is equal to at least ten gigahertz (GHz).

30. (Currently Amended) A magnetic writer comprising:

a write pole; and

a coil adjacent the write pole having a current that includes a write current component and a high frequency component, wherein the write current component of the current generates a magnetic write field and the high frequency component of the current creates magnetic precession within the write pole that results in the generation of a high frequency magnetic field;

wherein the magnetic write field ~~current component~~ and the high frequency magnetic field ~~component~~ are controlled to create an area of magnetic resonance within a magnetic media.

31. (Previously Presented) The magnetic writer of claim 30, wherein the high frequency component of the current is created by configuring a current generation circuit to produce high frequency oscillations in the current following a transition in the write current component from one direction to an opposite direction.

32. (Previously Presented) The magnetic writer of claim 30, wherein the high frequency component of the current is created by modulating the current with a high frequency current.

33-34. (Canceled)

35. (Currently Amended) The magnetic writer of claim [[34]] 30, wherein the area of magnetic resonance is dependent on the physical properties of the magnetic media, the frequency of the high frequency magnetic field, and the magnitude of the magnetic write field.

36. (Currently Amended) A magnetic head comprising:

a magnetic pole;

a coil adjacent the magnetic pole, the coil having a write current;

a magnetic media adjacent the magnetic pole; and

writing means for creating an area of magnetic resonance on a portion of the magnetic media, wherein the writing means introduces a high frequency signal to the write current by producing a high frequency oscillation in the write current following a transition in the write current component from one direction to an opposite direction.

37. (Canceled) The magnetic head of claim 36, wherein the writing means introduces the high frequency signal to the write current by producing a high frequency oscillation in the write current following a transition in the write current component from one direction to an opposite direction.

38. (Previously Presented) The magnetic head of claim 36, wherein the high frequency signal creates magnetic precession within the magnetic pole, wherein the magnetic precession created within the magnetic pole creates a high frequency magnetic field.

39. (Previously Presented) The magnetic head of claim 36, wherein the write current generates a magnetic write field and the high frequency signal introduced to the write current generates a high frequency magnetic field, wherein the magnetic write field and the high frequency magnetic field interact to create the area of magnetic resonance within the magnetic media.

40. (Previously Presented) The magnetic head of claim 39, wherein the area of magnetic resonance within the magnetic media is dependent on the physical properties of the magnetic media, frequency of the high frequency magnetic field, and magnitude of the magnetic write field.

41. (New) A magnetic writer comprising:

a write pole; and

a coil adjacent the write pole having a current that includes a write current component and a high frequency component, wherein the write current component generates a magnetic write field and the high frequency component generates a high frequency magnetic field;

wherein the write current component and the high frequency component are controlled such that the magnetic write field and the high frequency magnetic field interact to create an area of magnetic resonance within a magnetic media.

42. (New) The magnetic writer of claim 41, wherein the high frequency component of the current is created by configuring a current generation circuit to produce high frequency oscillations in the current following a transition in the write current component from one direction to an opposite direction.

43. (New) The magnetic writer of claim 41, wherein the high frequency component of the current is created by modulating the current with a high frequency current.

44. (New) The magnetic writer of claim 41, wherein the area of magnetic resonance is dependent on the physical properties of the magnetic media, the frequency of the high frequency magnetic field, and the magnitude of the magnetic write field.